

HUNTERS POINT NAVAL SHIPYARD,
COMMERCIAL DRYDOCK AREA, BUILDING 205
East of the intersection of Robinson Avenue & Fischer Drive
San Francisco
San Francisco County
California

HAER NO. CA-2273-C

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
Department of the Interior
San Francisco, California 97104

HISTORIC AMERICAN ENGINEERING RECORD

Hunters Point Naval Shipyard, Commercial Drydock Area, Building 205

HAER No. CA-2273-C

Location: Hunters Point Naval Shipyard, San Francisco, California
USGS Quadrangle Hunters Point, 1993
UTM Coordinates for Building 205: 10 mE556522E mN/4175940

Significance:

Building 205, the pump house for Drydock 2, is located within the Hunters Point Naval Shipyard, Commercial Drydock Area. The historic area is significant at the state level for its important association with the development of commercial shipping and ship-repair in the San Francisco Bay area. The historic area is also a significant example of marine engineering, the work of master engineer, Howard C. Holmes, and a significant example of Neoclassical Revival architecture used for industrial buildings. Building 205, engineered by Holmes and designed in the Neoclassical Revival style, contributes to the significance of the historic area.

Description:

Building 205 (Pump House No. 2) was constructed in 1901-1903 as a pump house for Drydocks 1 and 2. Visually and functionally, the building can be divided into three sections: an engine room (west section); boiler room (middle section); and compressor room, which was added on the east end of the building by 1930 (**Photograph 2**). The engine and boiler rooms, which comprise the original sections of the building, display an eclectic mix of Colonial and Greek Revival elements which are common to the Neoclassical Revival style. Generally, this brick building has an L-shaped plan and sits on a concrete foundation. The building is topped by a series of composition-shingle gable roofs of varying heights. Both the engine and compressor rooms have roofs supported by wood trusses; the boiler room has a steel truss system supported by steel I-beams anchored to the interior brick walls. The building measures approximately 208' long and 61' at its widest point and is 56' in height. All brick is laid in a running bond pattern.

The western section best demonstrates the building's Greek Revival influences with its main symmetrical façade (west end), which is dominated by a pediment gable end decorated with a boxed and modillioned cornice with plain frieze located above three half-round brick arches set between brick pilasters. The gable end is clad with slate shingles and includes an arched louver vent which was originally flanked by fixed wood panels (only one panel remains) to mimic a Palladian window. Two twelve-over-twelve double-hung wood windows set below a nineteen light wood fixed transom window are found within the outer arches. A metal roll-up door has replaced the original wood-panel double doors once found within the center arch. This side of the building has canted corners with elaborate crossed brackets (**Photograph 7**).

The north and south sides of this section, as well as the middle (boiler room) segment which is narrower in width, are decorated by brick arches of varying widths set singularly or in pairs with

twelve-over-twelve and sixteen-over-sixteen windows placed singularly or in pairs below multi-light transom windows, all set between brick pilasters (**Photograph 9**). Three arches have been infilled (windows removed) with brick, and some pilasters were removed on the north side of the boiler room, likely during the 1940s when the Navy constructed the small concrete substation on the north side of the building. Both sections have a corbelled-brick architrave below a boxed and modillioned cornice. A second main entrance is located on the north side, centered within the boiler room section. Only one side of the wood-panel double door remains below the thirty-light fixed transom window. Other secondary entrances include original arched, wood-panel doors located on the north, south, and west side of the western section. The east side of the boiler room is similar in design to the engine room section, with a pedimented gable clad with slate tile, an arched wood louver vent, boxed and modillioned cornice, brick arches and pilasters, and twenty-over-twenty double-hung wood windows with fixed transom. While the addition of the compressor room conceals most of the east side of the building, all architectural details and materials are still extant and intact.

The compressor room (east section) is the second addition constructed on the east end of Building 205. It is modest in both size and architectural detail when compared to the original sections of this Neoclassical Revival building. This addition is a one story, wood-frame building with brick siding, topped by a side gable roof with projecting eaves, exposed rafter tails, and a small monitor vent centered on its roof. Wood shingles decorate the gable end. Fenestration includes simple rectangular six-over-six double-hung wood windows with soldier arches and brick sills spaced evenly around the building, only interrupted by three entrances. The main entrance to this section has been infilled by wood and is found on the south side. The other two entrances are sited on the north side and include a wood-panel door with upper glazing and modern, exterior-mounted, sliding wood door.

When completed in 1903, Building 205 was positioned between existing Drydock 1 and the site of Drydock 2, completed later that year. The building was designed to house the equipment necessary to pump both drydocks. Although much of the equipment has been removed from the interior of Building 205, many components remain. The compressor room has the fewest remnants of equipment (**Photograph 16**). Most prominent in that room is an empty steel mesh cage attached to a concrete floor. In the boiler room, one of the boilers, still vented to a chimney in the roof, remains in the center of the room. In the southeast corner is a small chamber constructed of wood paneled walls with open windows and roof, once used as an oil room (**Photograph 17**). A steel staircase leads to a platform on the south side of the room; another set of stairs ascends from the platform to another small rectangular platform high in the center of the room, just beneath the trusses. The concrete floor and cement-plaster walls have no decorative detailing. Empty metal boxes that once accommodated switchgear are affixed to the west wall, connecting a switchgear panel within the engine room.

The engine room housed centrifugal pumps in a deep pit beneath. Three large motors with engine wheels still wound with rope dominate the center of the room (**Photograph 20**). The wheels are mounted with their axles approximately two feet above floor level. Flooding of the wheel pit inhibited complete visual inspection of the pump well. A metal staircase descends into the pit at the center motor. Interior walls of the engine room are clad in original vertical Oregon

pine paneling. Window and door surrounds have a decorative wood molding that matches a cornice extending around the interior at mid-level (**Photograph 24**). Exposed wood trusses, rafters, and purlins are visible in the ceiling. An I-beam, mounted to breast timbers in the ceiling, supports a pulley system. The original wood flooring is covered by what appears to be linoleum. A small interior door in the southeast corner of the engine room leads to a very small room formed by the exterior.

History:

For a detailed history of Hunters Point Naval Shipyard, Commercial Drydock Area, please refer to **HAER No. CA-2273**.

The San Francisco Dry Dock Company, successor of California Dry Dock Company, owned and operated the original Drydock 1 at Hunters Point at the turn of the twentieth century. Since construction of that original drydock at Hunters Point in 1868, ships had increased in size. In order to accommodate the larger commercial ships, San Francisco Dry Dock Company decided to construct a new, larger drydock at its site. The company offered well-established engineer Howard C. Holmes a position as chief engineer to design the new drydock and pumping house, which he accepted, resigning his post as chief engineer of the California State Board of Harbor Commissioners.¹

Once Holmes had prepared plans and specifications for the new drydock and pumping house, San Francisco Dry Dock Company opened construction bids late in October 1900 and awarded the contract to the City Street Improvement Company. Work began on January 9, 1901 and on February 1, 1903, the first vessel drydocked.²

Excavation work for Drydock 2 resulted in the demolition of the original pump house for Drydock 1, however the gate house (Building 204) remained during the early phases of construction. Holmes' plans called for a new steam generating power plant (Building 205) to serve both the old and new drydocks. The building housed boilers and engines and was constructed of brick, in two sections, one 40' x 90' and the other 50' x 60'. In profile the form of the building suggested a steam locomotive, with the chimney contributing to the effect; the form also resembles early train stations with attached trainsheds. Neoclassical Revival in style, the arched windows and doorways, pilasters, cornices, eyebrow dormers, and Palladian-style louvered vent in the pediment echoed the stylistic elements popularized for industrial design at the Columbian Exposition in 1893. Equally formal, the interior of the engine room had walls, floors, and ceiling of naturally finished Oregon pine. More utilitarian in appearance than the engine room, the boiler room, designed to house seven Babcock & Wilcox water-tube boilers, had plastered walls and a concrete floor. A row of coal bunkers lined the front of the boiler room. "Endless rope" connected three Corliss engines, 350 horse power each, to centrifugal pumps below in the pump pit. The pump pit beneath the engine room was 37' deep with

¹ "Four Wharves to Cost Nearly Half a Million," *San Francisco Call*, October 11, 1900, 12; "Ready to Begin the Construction of a Drydock of Gigantic Size," *San Francisco Call*, November 18, 1900, 23; "Chief Engineer Holmes Resigns His Position," *San Francisco Chronicle*, February 21, 1901, 12.

² Howard C. Holmes, *Plan Showing Location of Old and New Dry Docks at Hunters Point San Francisco Cal, Property of San Francisco Dry Dock Co*, 1903, Water Resources Center Archives, Berkeley, Charles Derleth Papers, Box 18, Folder 96.

concrete walls, and a concrete floor and I-beams to support the pumps. 38" discharge pipes and 26" suction pipes connected each of the three centrifugal pumps, respectively, to the bay and the drydock chambers. The discharge tunnel extended east to the bay from the pump pit. As planned, the building only consisted of two sections; however, a third section has been present since at least 1916. Photographs dated in the mid-1910s through the early 1920s show an addition at the east end of the building with a shed roof and wood paneled exterior walls. By 1930 this addition had been removed and the current brick-clad, gable-roof addition was present. The addition served as the compressor house for the steam generating plant.³

In 1916-18 Union Iron Works obliterated Drydock 1 and constructed a larger drydock, Drydock 3, in its place. They also commissioned the construction of a new pumping plant, Building 140, to pump Drydock 3. Obliteration of Drydock 1 and construction of Building 140 relieved Building 205 of pumping two drydocks, however Holmes engineered the new system so that Building 205 retained the ability to pump both drydocks in the event of emergency or mechanical failure in Building 140. A tunnel installed from the pump pit under Building 205 connected the pit to the new drydock.⁴

In the late 1930s, the Navy took interest in acquiring Hunters Point in response to war in Europe and the Pacific. A congressional act in 1939 allowed Bethlehem Shipbuilding to sell Hunters Point to the Navy and in December 1941, after the attack on Pearl Harbor, the Navy took moved onto the site. Although operating successfully since 1903 and 1918, the drydocks and pumping houses needed modernizing and rehabilitation to accommodate the Navy's wartime needs. This work began in earnest in early 1942 with construction of new buildings, and particular attention to repair of the drydocks themselves. At the time of acquisition, Building 205 was still a steam generating plant, supplying power to the pumps and the large brick chimney was still present. Sometime in early 1942, the Navy removed the chimney and by January 1943 two new steel stacks were added to the ridge of the center section of the building. The plans for the new chimney system also called for re-roofing the building by resetting existing slate if practicable, or laying asbestos shingles; during field inspection performed in May 2009 heavily deteriorating shingles, not composed of slate, were present. Plans for the new roof did not retain the original eyebrow dormers or skylights (**Photographs 25, 26**). The Navy also revamped the power generating and pumping systems associated with Drydock 2. As Hunters Point expanded during World War II, so did its demand for power. In December 1942 two reconditioned boilers were

³ Carl W. Condit, *American Building Art: The Nineteenth Century* (New York: Oxford, 1960), 197-200; "The New 750-Foot Drydock of the San Francisco Drydock Co., at Hunters Point, Cal.," *Journal of the American Society of Naval Engineers* XII (Washington, D.C.: R. Beresford, 1900), 1033-1037; Holmes, *Plan Showing Location of Old and New Dry Docks at Hunters Point*, 1903; "Hunters Point Dry Docks as Seen From Army Airplane," *San Francisco Examiner*, May 6, 1923, sec. K, pg. 3; *Photograph*, 1930, RG 181, Records of Naval District and Shore Establishments, 12th Naval District, SF Naval Shipyard – Hunters Point, Historical Shipyard Photographic Collection, 1904-74, 9NS-S 181-95-010, Box 3, Folder Hunters Point Naval Shipyard Aerial Photograph Binder [1930-1969]; *Bethlehem Shipbuilding – Hunters Point Dry Dock Construction, December 10, 1916*, Photograph, San Francisco Public Library, Historic Photograph Collection, Folder: S.F. Districts – Hunters Point, Photo Nos. AAB-8917, AAB-8918; "The New 750-Ft. Dry-Dock of the San Francisco Dry-Dock Co., at Hunter's Point, Cal.," *Engineering News* (October 1900), 276-278.

⁴ Howard C. Holmes, *Specifications for a Concrete Graving Dock for the Union Iron Works, Hunters Point, San Francisco*, 1916, M.M. O'Shaughnessy Papers, Subseries 1.3, Carton 10, Folder 22, Bancroft Library, 33.

placed in operation in the boiler room. By August 1943 the Bureau of Yards and Docks was advised that these steam generators were deteriorating rapidly and would not last longer than fifteen months. An electric drive system was installed to replace them. The Navy built an electrical substation on the north side of Building 205 sometime between 1942 and 1943 to house the transformer necessary to convert the building to electric power. The actual conversion to electricity occurred sometime between 1946 and 1950. Centrifugal pumps, which had deteriorated over time also had to be replaced with identical pumps made by the Navy's shops. The new system still used endless rope to transmit power to the pumps but the original rope, used since 1903, was replaced. The Navy also made utilitarian alterations to the west end, or engine room after the production officer at the site requested women's lockers be added to a loft floor, and a tool room to the first floor.⁵

After World War II the Hunters Point facility continued to serve as a docking area for Navy ships for repair, overhaul, maintenance and conversion. In 1974, the Navy deactivated the shipyard and leased the facility to private industry; however, the Navy continued to station several of its ships at Hunters Point. In 1991, the Base Realignment and Closure (BRAC) Commission identified Hunters Point for closure. Over the next decade, the Navy and City and County of San Francisco negotiated terms for the lease and subsequent transfer of the facility.⁶

⁵ "History of Bethlehem's San Francisco Yard, 1849-1949," *Pacific Marine Review* (October 1949), 27-34, 88; *Drydock No. 2, General*, Department of the Navy, Bureau of Yards & Docks, San Francisco, P.W. Drawing No. 116793, April 7, 1954, BRAC PMO West Caretaker Site Office, Yerba Buena Island; Austin Willmott Earl, Consulting Engineer, *Boiler House Reconstruction Details*, March 14, 1942, P.W. Drawing Nos. 113923, 113926, 113927; *W.M. Johnson to Bureau of Yards and Docks*, October 20, 1943, Folder: N23 Generating Plants, Box: 27, Hunters Point Naval Shipyard General Correspondence, RG 181, National Archives and Records Administration (San Bruno); *Memorandum, Production Officer to Public Works Officer*, September 30, 1943, Folder: N23 Generating Plants, Box 27, Hunters Point General Correspondence, RG 181, NARA (San Bruno).

⁶ JRP Historical Consulting Services, *Historic Context and Inventory and Evaluation of Buildings and Structures, Hunters Point Shipyard, San Francisco*, September 1997, 27-28; "San Francisco Naval Shipyard in Permanent Status," *Pacific Marine Review* (June 1947), 63-65, 120; Bonnie L. Bamburg, *Historical Overview of Hunters Point Annex Treasure Island Naval Base and Descriptions of Properties that Appear Eligible for Listing in the National Register of Historic Places*, Submitted to Western Division, Naval Facilities, Engineering Division, 1988, 44-45; Steven R. Black, *Mare Island Naval Shipyard, Historic American Engineering Record for Hunters Point Naval Shipyard, Drydock No. 4, HAER No. CA-181-A*, (April 1994) 11-12.

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Historians: Heather Norby and Toni Webb
JRP Historical Consulting, LLC
1490 Drew Avenue, Suite 110
Davis, CA 95618
530-757-2521
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Project Information: This project was undertaken to fulfill the requirements of the *Memorandum of Agreement Among The United States Navy, The Advisory Council for Historic Preservation and The California State Historic Preservation Officer Regarding the Interim Leasing and Disposal of Historic Properties on the Former Hunters Point Naval Shipyard, San Francisco, California*. Heather Norby and Toni Webb of JRP Historical Consulting, LLC (JRP) prepared this document for the Navy. Both Ms. Norby and Ms. Webb conducted fieldwork, contributed to architectural descriptions and the historic context. JRP conducted research at the California State Library, Hunters Point Naval Shipyard (Building 383), National Archives and Records Administration (San Bruno), San Francisco Public Library, San Francisco Maritime National Historical Park Library, and the BRAC PMO West Caretaker Site Office on Treasure Island. William B. Dewey produced the photography.

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SITE MAP:

